AMENDMENT OF SOLICITAT	TION/MODIFICATION O	F CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF 2
2. AMENDMENT/MODIFICATION NO. M145	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/I	PURCHASE 5. PROJECT N	PAGES O. (If applicable)
6. ISSUED BY CODE U.S. Department of Energy National Nuclear Security Administration Service Center Property and M&O Contract Support Department P.O. Box 5400 Albuquerque, NM 87185-5400		U.S. Departm National Nuc Manager, Par P.O. Box 300 Amarillo, TX	ent of Energy lear Security Administration ltex Site Office 30	DDE
8. NAME AND ADDRESS OF CONTRAC	TOR (No., street, county, state, Z		A. AMENDMENT OF SOLICITATIO	N NO.
Babcock & Wilcox Technica 800 Main Street	l Services Pantex, LLC	9	B. DATED (SEE ITEM 11)	
Lynchburg, VA 24505		1	0A. MODIFICATION OF CONTRAC	T/ORDER NO.
			DE-AC04-00AL66620	
		1	0B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE	 	July 28, 2000	
11. Ti	HIS ITEM ONLY APPLIES TO	AMENDMENTS C	F SOLICITATIONS	
☐ The above numbered solicitation is a extended.	mended as set forth in Item 14.	The hour and date	specified for receipt of Offers is	extended, 🗌 is not
(a) By completing Items 8 and 15, and re offer submitted; or (c) By separate letter ACKNOWLEDGMENT TO BE RECEIVE SPECIFIED MAY RESULT IN REJECTIC change may be made by telegram or letter to the opening hour and date specified. 12. ACCOUNTING AND APPROPRIATION.	or telegram which includes a restaurance of the PLACE DESIGNAT ON OF YOUR OFFER. If by virter, provided each telegram or letter	reference to the solid ED FOR THE RECE are of this amendmen	itation and amendment numbers. IPT OF OFFERS PRIOR TO THE t you desire to change an offer alr	FAILURE OF YOUR HOUR AND DATE eady submitted, such
13. THIS IT	EM APPLIES ONLY TO MOD	DIFICATIONS OF C	ONTRACTS/ORDERS;	
IT MOD	IFIES THE CONTRACT/ORD	DER NO. AS DESC	RIBED IN ITEM 14.	
CONTRACT ORDER NO. IN IT		hority): THE CHANG	ES SET FORTH IN ITEM 14 ARE N	MADE IN THE
			MINISTRATIVE CHANGES (Such a	s changes in paying
C. THIS SUPPLEMENTAL AGREE	SET FORTH IN ITEM 14, PURSU MENT IS ENTERED INTO PURS			
D OTHER (O 'S. t				
D. OTHER (Specify type of modific X DEAR 970.5232-2 entitled "Pa Number 970.5204-2, "Laws, R	syments and Advances," DEA		tled "Contractor's Organization	," and DEAR
E. IMPORTANT: Contractor is not, 14. DESCRIPTION OF AMENDMENT/MC feasible.)	is required to sign this docum DDIFICATION (Organized by UCA	nent and return section headings, inc	copies to the issuing office. cluding solicitation/contract subject r	natter where
Contract Clause B.2 entitled, "Contr Clause H.33 entitled, "Responsible of Applicable Directives," is updated Officer since publication of version	Corporate Official," is modified with an as of date of January	ed to update name	of corporate official. Section J,	Appendix E, "List
Except as provided herein, all terms and full force and effect.				
15A. NAME AND TITLE OF SIGNER (Ty	pe or print)		TITLE OF CONTRACTING OFFICE Clein, Contracting Office	
15B. CONTRACTOR/OFFEROR	15C. DATE		ATES OF AMERICA	16C. DATE
	SIGNED	يكر ال		SIGNED
BY(Signature of person authorized	to sign)	BY (Sig	nature of Contracting Officer)	1/15/2ct
NSN 754-01-152-8070 PREVIOUS EDITION UNUSABLE MS ()		0-105	STANDARD FORM 30 (F Prescribed by GSA FAR (48 CFR) 53.243	tEV. 10-83) temp03.dot

1. Contract Clause B.2 entitled, "Contract Type and Value," subparagraph (b) (3) is revised to incorporate the Earned Fee. The revised Contract Clause B.2 entitled, "Contract Type and Value," subparagraph (b) (3) is provided below in its entirety.

B.2 CONTRACT TYPE AND VALUE

(b)(3) The total available fee is a combination of the Performance Incentive Fee and Fixed Fee related to the Work for Others and Other Reimbursable Work effort. Actual available fee will be earned by the contractor based on performance related to award fee and performance-based incentives. The total available fee pool and earned fee for the specified period(s) is set forth below:

Contract Periods	Available Fee	Earned Fee
February 1, 2001, through September 30, 2001 Award Fee & Performance-Based Incentives	\$14,700,000	\$12,795,811
October 1, 2001 through September 30, 2002 Award Fee & Performance-Based Incentives	\$23,300,000	\$21,507,809
October 1, 2002 through September 30, 2003 Award Fee, Performance-Based Incentives & Comprehensive Incentives	\$23,700,000	\$20,619,000
October 1, 2003 through September 30, 2004 Award Fee & Performance-Based Incentives	\$26,400.000	\$23,502,961
October 1, 2004 through September 30, 2005 Award Fee & Performance-Based Incentives	\$28,140,565	\$25,129,523
October 1, 2005 through September 30, 2006 Award Fee & Performance-Based Incentives Work for Others Other Reimbursable Work Total	\$29,875,417 \$ 109,778 (est) \$ 538,832 (est) \$30,524,027	\$27,501,337 \$ 150,435 \$ 537,040 \$28,188,812
October 1, 2006 through September 30, 2007 Award Fee & Performance-Based Incentives Work for Others Other Reimbursable Work Total	\$33,395,888 \$ 84,238 (est) \$ 457,800 (est) \$33,937,926	\$30,676,159 \$ 175,271 \$ 499,504 \$31,350,934

Attachment to Modification M145 B&W Pantex Contract No. DE-AD04-00AL66620

October 1, 2007 through September 30, 2008

Award Fee & Performance-Based Incentives \$36,114,000
Work for Others \$186,000 (est)
Other Reimbursable Work \$73,000 (est)
Total \$36,373,000

2. Contract Clause H.33 entitled, "Responsible Corporate Official," is modified to Update name of corporate official. The revised Contract Clause H.33 entitled, "Responsible Corporate Official," is provided below in its entirety.

H.33 RESPONSIBLE CORPORATE OFFICIAL

Notwithstanding the Section H provision entitled "Performance Guarantee," the Government may contact, as necessary, the single responsible corporate official identified below, who is at a level above the Contractor and who is accountable for the performance of the Contractor. Should the responsible corporate official change during the period of the contract, the Contractor shall promptly notify the Government of the change in the individual to contact.

Name: Robert S. Cochran

Position: President

Company: <u>Babcock & Wilcox Technical Services, Inc.</u>

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS SECTION J – LIST OF ATTACHMENTS

<u>APPENDIX E – LIST OF APPLICABLE DIRECTIVES</u>

January 15, 2008

Pursuant to the contract clause entitled "Laws, Regulations, and DOE Directives," the following list of directives is applicable to this contract. Environmental, Safety, and Health (ES&H) requirements for work conducted under this contract have been incorporated into this Appendix using a DOE-approved tailored process, Contractor-prepared document entitled "Management Integration & Controls Document" (MIC), which is BWXT's Integrated Safety Management System Description Requirements.

List A

Pursuant to DEAR 970.5204-2(a) the contractor shall comply with the requirements of applicable Federal, State, and local laws and regulations, unless relief has been granted in writing by the appropriate regulatory agency. Omission of any applicable law or regulation from this list does not affect the obligation of the contractor to comply with such law or regulation.

Laws & Regulations	Title
10 CFR 71	Packaging and Transportation of Radioactive Material
10 CFR 435	Energy Conservation Voluntary Performance Standards for New
	Buildings; Mandatory for Federal Buildings
10 CFR 707	Workplace Substance Abuse Programs at DOE Sites
10 CFR 708	DOE Contractor Employee Protection Program
10 CFR 709	Counterintelligence Evaluation Program
10 CFR 710	Criteria and Procedures for Determining Eligibility for
	Access to Classified Matter or Special Nuclear Material
10 CFR 712	Human Reliability Program
10 CFR 820	Procedural Rules for DOE Nuclear Activities
Appendix A	
10 CFR 830	Nuclear Safety Management
10 CFR 835	Occupational Radiation Protection
10 CFR 850	Chronic Beryllium Disease Prevention Program
10 CFR 851	Worker Safety and Health Program
10 CFR 852	Guidelines for Physician Panel Determination on Worker Requests
	for Assistance in Filing for State Workers' Compensation Benefits
10 CFR 824	Procedural Rules for the Assessment of Civil Penalties for Classified
	Information Security Violations
10 CFR 1016	Safeguards of Restricted Data

Laws & Regulations	Title
10 CFR 1021	National Environmental Policy Act Implementing Procedures
10 CFR 1022	Compliance with Floodplain and Wetland Environmental Review
	Requirements
10 CFR 1046	Physical Protection of Security Interests
10 CFR 1047	Limited Arrest Authority and Use of Force by Protective Force
	Officers
15 CFR 730-774	Export Control Policy – Export Administration Regulations
29 CFR 1904	Recording and Reporting Occupational Injuries and Illnesses
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
36 CFR Ch XII,	National Archives and Records Administration – Records
Sub-Chapter B	Management
36 CFR 60	National Register of Historic Places
36 CFR 63	Determinations
36 CFR 79	Curation of Federally-Owned and Administered Archaeological
	Collections
36 CFR 800	Protection of Historic Properties
40 CFR 50	National Primary and Secondary Ambient Air Quality Standards
40 CFR 53	Ambient Air Monitoring Reference and Equivalent Methods
40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 61	National Emission Standards for Hazardous Air Pollutants
40 CFR 63	National Emission Standards for Hazardous Air Pollutants For
	Source Categories
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 80	Regulation of Fuels and Fuel Additives
40 CFR 82	Protection of Stratospheric Ozone
40 CFR 109	Criteria for Sate, Local and Regional Oil Removal Contingency Plans
40 CFR 110	Discharge of Oil
40 CFR 112	Oil Pollution Prevention
40 CFR 116	Designation of Hazardous Substances
40 CFR 117	Determination of Reportable Quantities for Hazardous Substances
40 CFR 121	State Certification of Activities Requiring a Federal License or
	Permit
40 CFR 122	EPA Administered Permit Programs: The National Pollutant
	Discharge Elimination System
40 CFR 123	State Program Requirements
40 CFR 125	Criteria and Standards for the National Pollutant Discharge
	Elimination System
40 CFR 131	Water Quality Standards
40 CFR 133	Secondary Treatment Regulation

Laws & Regulations	Title
40 CFR 136	Guidelines Establishing Test Procedures for the Analysis of
	Pollutants
40 CFR 141	National Primary Drinking Water Regulations
40 CFR 142	National Primary Drinking Water Regulations Implementation
40 CFR 143	National Secondary Drinking Water Regulations
40 CFR 156	Labeling Requirements for Pesticides and Devices
40 CFR 170	Worker Protection Standard
40 CFR 171	Certification of Pesticide Applicators
40 CFR 260	Hazardous Waste Management System General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment,
	Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous
	Waste Treatment, Storage, and Disposal Facilities
40 CFR 266	Standards for the Management of specific Hazardous Wastes and
	Specific Types of Hazardous Waste Management Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 273	Standards for Universal Waste Management
40 CFR 279	Standards for the Management of Used Oil
40 CFR 280	Technical Standards and Corrective Action Requirements for Owners
	and Operators of Underground Storage Tanks (UST)
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
40 CFR 370	Hazardous Chemical Reporting: Community Right-To-Know
40 CFR 372	Toxic Chemical Release Reporting: Community Right-To-Know
40 CFR 761	Polychlorinated Biphenyls (PCBS) Manufacturing, Processing,
40 GED 4500	Distribution in Commerce, and Use Prohibitions
40 CFR 1500	Council on Environmental Quality – Purpose, Policy, and Mandate
40 CFR 1501	NEPA and Agency Planning
40 CFR 1502	Environmental Impact Statement
40 CFR 1503	Commenting
40 CFR 1504	Predecision Referrals to the Council of Proposed Federal Actions to
40 CED 1505	be Environmentally Unsatisfactory
40 CFR 1505	NEPA and Agency Decisionmaking
40 CFR 1506	Other Requirements of NEPA
40 CFR 1507	Agency Compliance
40 CFR 1508	Terminology and Index
41 CFR 60	Office of Federal Contract Compliance Programs, Equal
	Employment Opportunity, Department of Labor

Laws & Regulations	Title
41 CFR 101	Federal Property Management Regulations
41 CFR 109	Department of Energy Property Management Regulations
43 CFR 7	Protection of Archaeological Resources
43 CFR 10	Native American Graves Protection and Repatriation Regulations
48 CFR 45	Contract Management – Government Property
48 CFR 47	Transportation
48 CFR 970	DOE Management and Operating Contracts
49 CFR 40	Procedures for Transportation Workplace Drug and Alcohol Testing
	Programs
49 CFR 107	Hazardous Materials Program Procedures
49 CFR 171	Hazardous Materials Regulations – General Information,
	Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials
	Communications, Emergency Response Information, and Training
	Requirements
49 CFR 173	Shippers General Requirements for Shipments and Packages
49 CFR 174	Carriage by Rail
49 CFR 175	Carriage by Aircraft
49 CFR 176	Carriage by Vessel
49 CFR 177	Carriage by Public Highway
49 CFR 178	Specifications for Packagings
49 CFR 179	Specification for Tank Cars
49 CFR 180	Continuing Qualification and Maintenance of Packagings
49 CFR 380	Transportation
49 CFR 382	Controlled Substances and Alcohol Use and Testing
49 CFR 383	Commercial Driver's License Standards; Requirements and Penalties
49 CFR 385	Safety Fitness Procedures
49 CFR 387	Minimum Levels of Financial Responsibility for Motor Carriers
49 CFR 390	Federal Motor Carrier Safety Regulations; General
49 CFR 391	Qualifications of Drivers and Longer Combinations Vehicle (LCV)
10.077.000	Driver Instructions
49 CFR 392	Driving of Commercial Motor Vehicles
49 CFR 393	Parts and Accessories Necessary for Safe Operation
49 CFR 395	Hours of Service Drivers
49 CFR 396	Inspection, Repair, and Maintenance
49 CFR 397	Transportation of Hazardous Materials; Driving and Parking Rules
49 CFR 571	Federal Motor Vehicle Safety Standards
50 CFR 10	Taking, Possession, Transportation, Sale, Purchase, Barter,
	Exportation, and Importation of Wildlife and Plants – General
	Provisions

Laws & Regulations	Title
50 CFR 17	Endangered and Threatened Wildlife and Plants
50 CFR 402	Interagency Cooperation Endangered Species Act of 1973, as
	Amended
16 USC	Conservation
49 USC 5109(f)	Transportation
EO 11514	Protection and Enhancement of Environmental Quality
EO 11988	Floodplain Management
EO 11990	Protection of Wetlands
EO 12898	Environmental Justice
EO 13101	Greening the Government Through Waste Prevention, Recycling,
	and Federal Acquisition
EO 13123	Greening the Government Through Efficient Energy Management
EO 13186	Responsibilities of Federal Agencies to Protect Migratory Birds
	Americans with Disabilities Act of 1990
	Atomic Energy Act
	Energy Policy Act of 1992
DEAR 952.236.70	Administrative Terms for Architect-Engineer Contracts
OMB Circular A-130	Management of Federal Information Resources
NHPA 110	Guidelines for Federal Agency Responsibilities under Section 110 of
	the National Historic Preservation Act (16 U.S.C. 470)
NHPA CRMP	Comprehensive Cultural Resource Management Plan for Pantex
(April 2004)	
TCEQ	Air Quality Permit
Air Permit 18379	
TCEQ	Air Quality Permit
Air Permit 21233	
USDA-APHIS	Wildlife Services; Letter of Authorization: Transport Skunks for
	Euthanization, Animal Control Authorization
TCEQ Permit	Water Quality Permit to Dispose of Waste
WQ000229600	
(EPA TX 0107107-	
NEPDES) TCEQ Permit	Water Ovelity Demait for Land Application
WQ0004397000	Water Quality Permit for Land Application
TCEQ Permit 02296	Permit to Dispose of Waste
TCEQ Permit 04397	Texas Land Application
TCEQ Permit 30459	Solid Waste Registration Numbers
1000 1011111 30437	(EPA Number TX4890110527)
TCEQ Permit CP-	RCRA Compliance Plan
50284	Refer Compitance Fian
TCEQ Permit HW-	RCRA Hazardous Waste Permit
50284	

Laws & Regulations	Title
TCEQ Permit by Rule	Authorizations For Emissions to Atmosphere for Small Sources
TCEQ PERM 282334	Self-certification as a Synthetic Minor Source Under Title V of the
	Federal Clean Air Act (Federal Operating Permit)
	(Compliance with 30 TAC 122)
TCEQ TPDES MSGP	Visual Monitoring GP Construction Storm Water
TCEQ ID # 0330007	Public Water System ID Number
TCEQ UIC Permits	Underground Injection Control Class V Wells
5W2000017	Associated with Permit WQ0004397000
5X2600215	Associated with Permit CP-50284
5X250089	Associated with Permit CP-50284
5X250098	Associated with Permit CP-50284
TPDES TXR05P506	Multi-Sector Industrial Storm Water Permit
TPDES TXR150000	Storm Water General Permit for Construction Projects
TAC Title 4	Texas Administrative Code - Agriculture
TAC Title 22	Texas Administrative Code - Examining Boards
TAC Title 25	Texas Administrative Code – Health Services
TAC Title 30	Texas Administrative Code – Environmental Quality
TAC Title 30	Texas Administrative Code – Subsurface Area Drip Dispersal
Chapter 222	Systems
TAC Title 31	Texas Administrative Code – Natural Resources and Conservation
TAC Title 43	Texas Administrative Code – Transportation
TCEQ Memo	Texas Commission on Environmental Quality (TCEQ) Toll Free
2/15/2006	Homeland Security Threat Reporting Number
TPWC 64	Texas Parks and Wildlife Code: Birds
TPWC 66	Texas Parks and Wildlife Code: Fish
TPWC 67	Texas Parks and Wildlife Code: Non Game Species
TPWC 68	Texas Parks and Wildlife Code: Endangered Species
TPWC 71	Texas Parks and Wildlife Code: Licenses and Regulations
TPWC 88	Texas Parks and Wildlife Code: Endangered Plants
TPWD-SPR-1296-844	Wildlife Research
TPWD- (no number)	Furbearing Animal Trap & Release Permit
TWC 26	Texas Water Code: Water Quality Control

List B

Pursuant to DEAR 970.5204-2(b) the contractor shall comply with the requirements of these Department of Energy directives, or parts thereof, as identified. Applicability to the Pantex Prime Contract is determined to be effective with the approval for incorporation or removal notification as directed by the Pantex Site Office Contracting Officer by separate memorandum and will be posted to this list during the next periodic update and publication of a modification to the Pantex Prime Contract.

Directive	Title	Full (F)
		Partial (P)
		Incorporation
MIC-1000	Management, Integration & Controls Document, Issue 17	F
HC-2100	Fire Protection Section of the Hazards Control	F
	Standards/Requirement Identification Document (S/RIDS),	
	Issue 10	
HC-2300	Occupational Safety and Health Section of the Hazards	F
	Control S/RID, Issue 10	
HC-2500	Off-Site Packaging & Transportation Section of the Hazards	F
	Control S/RIDS, Issue 08	
HC-2600	On-Site Packaging and Transfer Section of the Hazards	F
	Control S/RID, Issue 04	
MS-3210	Facility Engineering and Construction Section of the Mission	F
	Support S/RID, Issue 10	
MS-3400	Environmental Management Section of the Mission Support	F
	S/RID, Issue 11	
O 110.3A	Conference Management	F
O 130.1	Budget Formulation Process	F
M 140.1-1B	Interface with the Defense Nuclear Facilities Safety Board (DNFSB)	P
O 142.1	Classified Visits Involving Foreign Nationals	F
P 141.2	Public Participation and Community Relations	F
O 142.3	Unclassified Foreign Visits and Assignments Program	F
O 151.1C	Comprehensive Emergency Management System	F
O 153.1	Department Radiological Emergency Response Assets	F
O 200.1	Information Management Program	F
M 200.1-1	Telecommunications Security Manual (Chapter 9)	P
O 205.1A	Department of Energy Cyber Security Management	F
M 205.1-3	Telecommunication Security Manual	F
M 205.1-4	National Security System Manual	F
N 205.2	Foreign National Access to DOE Cyber Systems	F
N 205.3	Password Generation, Protection, and Use	F

Directive	Title	Full (F) Partial (P)
		Incorporation
N 205.8	Cyber Security Requirements for Wireless Devices and Information Systems	F
N 205.11	Security Requirements for Remote Access to DOE and Applicable Contractor Information Technology Systems	F
N 206.4	Personal Identity Verification	F
O 210.2	DOE Corporate Operating Experience Program	F
O 221.1	Reporting Fraud, Waste, and Abuse to the Office of Inspector General	F
O 221.2	Cooperation with the Office of Inspector General	F
O 221.3	Establishment of Management Decisions on Office of Inspector General Reports	F
O 225.1A	Accident Investigations	F
O 226.1A	Implementation of Department of Energy Oversight Policy	F
M 231.1-1A	Environment, Safety and Health Reporting Manual	F
M 231.1-2	Occurrence Reporting and Processing of Operations Information	F
O 241.1A	Scientific and Technical Information Management	F
O 243.1	Records Management Program	F
O 243.2	Vital Records	F
P 251.1A	Departmental Directives Program Policy	F
O 251.1B	Departmental Directives Program	F
M 251.1-1B	Departmental Directives Program Manual	F
O 252.1	Technical Standards Program	F
O 341.1A	Federal Employee Health Services	F
O 350.1	Contractor Human Resource Management Programs	F
O 350.2A	Use of Management and Operating or Other Facility	F
	Management Contractor Employees for Services to DOE in the	
	Washington, D.C. Area	_
O 412.1A	Work Authorization System	F
O 413.1A	Management Control Program	F

Directive	Title	Full (F)
		Partial (P)
		Incorporation
O 413.3A	Program and Project Management for the Acquisition of Capital Assets	F
O 414.1C	Quality Assurance	F
O 420.1B	Facility Safety	P
G 420.1-1	Nonreactor Nuclear Safety Design Criteria and Explosive Safety Criteria Guide for use with DOE O 420.1 Facility Safety	P
O 425.1C	Startup and Restart of Nuclear Facilities	F
O 430.1B	Real Property Asset Management	P
O 430.2A	Departmental Energy and Utilities Management	F
O 433.1A	Maintenance Management Program for DOE Nuclear Facilities	F
O 435.1	Radioactive Waste Management	P
M 435.1-1	Radioactive Waste Manual	P
M 440.1-1A	DOE Explosives Safety Manual	F
G 440.1-5	Fire Safety Program for use with DOE O 420.1 and DOE O	P
G 420.1/BO	440.1 (G-420.1/B-0 G-440.1/E-0)	
G 440.1/EO		
O 442.1A	Department of Energy Employee Concerns Program	F
M 442.1-1	Differing Professional Opinions Manual for Technical Issues Involving Environment, Safety and Health	F
O 450.1	Environmental Protection Program	F
P 450.4	Safety Management System Policy	F
M 450.4-1	Integrated Safety Management System Manual	F
P 450.7	Department of Energy Environment, Safety and Health (ES&H) Goals	F
O 452.1C	Nuclear Explosive and Weapon Surety Program	F
O 452.2C	Safety of Nuclear Explosive Operations	F
M 452.2-1	Nuclear Explosive Safety Manual	F
O 452.3	Management of the Department of Energy Nuclear Weapons Complex	F
O 452.4A	Security and Control of Nuclear Explosives and Nuclear Weapons	F
M 452.4-1A	Protection of Use Control Vulnerabilities and Designs (Note: See PXSO Memorandum dated May 9, 2005)	P
O 457.1	Nuclear Counterterrorism	F
M 457.1-1	Control of Improvised Nuclear Device Information	F
O 460.1B	Packaging and Transportation	P
O 460.2A	Departmental Materials Transportation and Packaging Management	Р

Directive	Title	Full (F) Partial (P) Incorporation
O 461.1A	Packaging and Transfer or Transportation of Materials of National Security Interest	Р
M 461.1-1	Packaging and Transfer or Transportation of Materials of National Security Interest Manual	P
P 470.1	Integrated Safeguards and Security Management (ISSM) Policy	P
O 470.2B	Independent Oversight and Performance Assurance Program	F
O 470.3A	Design Basis Threat (DBT) Policy	F
M 470.4-1	Safeguards and Security Program Planning and Management	F
M 470.4-2	Physical Protection	F
M 470.4-3	Protective Force	F
M 470.4-4	Information Security	F
M 470.4-5	Personnel Security	F
M 470.4-6	Nuclear Material Control and Accountability	F
M 470.4-7	Safeguard and Security Program References	F
O 471.1A	Identification and Protection of Unclassified Controlled Nuclear Information	F
M 471.1-1	Identification and Protection of Unclassified Controlled Nuclear Information Manual	F
M 471.2-4	Technical Surveillance Countermeasures Manual (TSCM) (Annex)	P
O 471.3	Identifying and Protecting Official Use Only Information	F
M 471.3-1	Manual for Identifying and Protecting Official Use Only Information	F
O 475.1	Counterintelligence Program	F
O 475.2	Identifying Classified Information	F
M 475.1-1B	Manual for Identifying Classified Information	F
M 481.1-1	Reimbursable Work For Non-Federal Sponsors Process Manual	F
O 482.1	DOE Facilities Technology Partnering Programs	F
O 483.1	DOE Cooperative Research and Development Agreements	F
M 483.1-1	DOE Cooperative Research and Development Agreements Manual	F
O 484.1	Reimbursable Work for the Department of Homeland Security	F
O 522.1	Pricing of Departmental Materials and Services	F
O 534.1B	Accounting	F
O 551.1B	Official Foreign Travel	F
O 580.1	Department of Energy Personal Property Management Program	F
O 1220.1A	Congressional and Intergovernmental Affairs	F

Directive	Title	Full (F)
		Partial (P)
		Incorporation
O 1450.4	Consensual Listening-In to or Recording Telephone/Radio Conversations	F
O 5400.5	Radiation Protection of the Public and the Environment	P
O 5480.19	Conduct of Operations Requirements for DOE	F
O 5480.20A	Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities	P
O 5610.2	Control of Weapon Data	F
O 5639.8A	Security of Foreign Intelligence Information and Sensitive Compartmented Information Facilities	F
O 5660.1B	Management of Nuclear Materials	P
DOE/EH-	Standards Programs Criteria	F
0416		
DOE/EM- STD 5502-94	Hazard Baseline Documentation	P
DOE/NNSA 56XB Revision 2	Development and Production Manual	P
DOE/NNSA QC-1 Revision 10	DOE/NNSA Weapon Quality Policy (QC-1)	F
DOE STD 1020-2002	Natural Phenomena Hazards Performance Categorization Guidelines for Structures, Systems, and Components	P
DOE STD 1027-1992	Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports	F
DOE STD 1066-1999	Fire Protection Design Criteria	P
DOE STD 1073-2003	Configuration Management	F
DOE STD 1090-2004	Hoisting and Rigging	P
DOE STD 1091-1996	Firearms Safety	F
DOE HDBK 1092-2004	Electrical Safety	F
DOE STD 1135-1999	Guidance for Nuclear Criticality Safety Engineer Training and Qualification	P
DOE STD 1186-2004	Specific Administrative Controls	P

Directive	Title	Full (F) Partial (P) Incorporation
DOE STD 3007-2007	Guidelines for Preparing Criticality Safety Evaluations at Department of Energy Non-Reactor Nuclear Facilities	F
DOE STD 3009-1994	Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Safety Analysis	F
DOE STD- 3015-2004	Nuclear Explosive Safety Study Process (Note: See Memo from Charles Westfall, Director Nuclear Explosive Safety Division, dated July 28, 2005, for interpretation of Education Requirements)	F
DOE-NA- STD-3016- 2006	DOE Limited Standard, Hazard Analysis Reports for Nuclear Explosive Operations	F
DOE STD 3020-2005	Specification for HEPA Filters Used by DOE Contractors	F
DOE STD 3025-2007	Quality Assurance Inspection and Testing of HEPA Filters	F
DOE STD- 4001-2000	Design Criteria Standard for Electronic Records Management Software Applications	F
DOE Operational Procedures June 1998	Operational Procedures Enforcement June 1988 (Under Price-Anderson Amendments Act of 1988).	F
DOE Operational Procedures June 1998	Enforcement of DOE Nuclear Safety Requirements Under Price-Anderson Amendments Act of 1988	F
DOE Technical Manual	Tiedown Procedures for Type-B Containers, Shipped in Safe-Secure Trailers/Safeguards Transporter (SST/SFT)	F
DOE Technical Manual 45-51B	Transportation of Nuclear Weapons Material	Р
DOE	Memorandum: Clarification of Annual Visual Inspection of all Protected Transmission Systems (PTS) (Reference DOE Manual 200.1-1)	F
DOE	Memorandum: Transmission Security Criteria for Marking Classified Lines (Reference DOE Manual 200.1-1)	F
DOE	Memorandum: Improved Cyber Security Protection for Classified Computer Systems (Reference DOE Order 205.1)	F

Directive	Title	Full (F)
		Partial (P)
		Incorporation
DOE	Memorandum: Department of Energy Standard 1027	F
	Supplemental Guidance (Reference DOE STD-1027-92)	
NWC TBP	Nuclear Weapons Complex (NWC)	F
	Technical Business Practice (TBP)	
	Infrastructure Business Practices (IBPs)	
	TBP-CM, Issue A: Configuration Management	
	TBP-PRP, Issue E: Product Realization Process	
	TBP-SYS, Issue H: Technical Business Practice System	
	TBP-000, Issue E: Program Management	
	TBP-001, Issue C: Major Assembly Release System	
	TBP-100, Issue G: Concurrent Qualification	
	TBP-101, Issue H: Engineering Evaluation Process	
	TBP-200, Issue E: Product Identification and Traceability	
	TBP-201, Issue D: Weapon Identification Systems and	
	Marking Criteria	
	TBP-202, Issue E: Record of Assembly and Disassembly	
	IBP-202, Issue B: Record of Assembly and Disassembly	
	TBP-203, Issue E: Weapon Record Cards	
	(Addendum: NNSA Memorandum, Request for Pantex	
	Actions to Continue support of Electronic Inspection Record Cards (IRC), dated November 30, 2007)	
	TBP-300, Issue E: Product Definition	
	TBP-301, Issue J: Methods of Definition	
	TBP-302, Issue D: Product and Equipment Designations	
	TBP-303, Issue D: Seven-Digit Material and Process	
	Specifications, and Public Domain Definition	
	TBP-304, Issue E: Defining Commercial Product in the	
	Engineering Drawing System	
	TBP-305, Issue D: Configuration of Type Weapons	
	TBP-306, Issue E: Software Product Processes	
	TBP-308, Issue A: Computer-Aided Design Process for	
	Electrical Products	
	TBP-400, Issue D: Design Control	
	TBP-401, Issue E: Definition Control	
	TBP-402, Issue F: Product Control	
	TBP-403, Issue E: Reviews	
	TBP-404, Issue F: Engineering Authorization System	
	IBP-404, Issue B: Engineering Authorization System	
	TBP-500, Issue D: Records Management	
	TBP-502, Issue A: Distribution of Non-Electronic Product	
	Definition Using Electronic Transmittal Methods	

Directive	Title	Full (F) Partial (P)
		Incorporation
	TBP-600, Issue D: Procurement	
	TBP-601, Issue C: Procurement Classes of Weapon Product	
	TBP-602, Issue D: Interpretation of Procurement index	
	TBP-700, Issue E: Product Acceptance and Control of	
	Nonconformance	
	TBP-701, Issue D: Acceptance Equipment Interfaces	
	TBP-702, Issue F: Nonconforming Material	
	TBP-703, Issue D: Product Reprocessing and Reworking	
	TBP-704, Issue D: Evaluation and Disposition of Discrepant	
	Weapon Material	
	TBP-800, Issue F: Stockpile Management TBP-801, Issue D: laboratory and Flight Test Material	
	TBP-802, Issue D: Telemetry Procedures	
	TBP-803, Issue F: Non-Nuclear Assurance Program	
	TBP-804, Issue F: Stockpile Support Material	
	TBP-805, Issue F: Repair and Retrofit of Weapons and	
	Ancillary Equipment	
	TBP-901, Issue B: Integrated Safety Process for Nuclear	
	Weapons Operations and Facilities	
NNSA	NAP-9A, SECON Implementation	F
NNSA	NAP 14.1-B, NNSA Cyber Security Program	F
NNSA	NAP 14.2-B, Baseline Cyber Security Requirements	F
NNSA	NAP 14.3-A, NNSA Protection Profile and Security Target	F
	Requirements	
NNSA	NAP 14.4-A, Open Public Unrestricted Access Information	P
	Group Protection Profile	
NNSA	NAP 14.5-A, Unclassified Protected Information Group	P
ND IC A	Protection Profile	
NNSA	NAP 14.6-A, Unclassified Mandatory Protection Information	P
NINIC A	Group Protection Profile	D
NNSA	NAP 14.7-A, Confidential/Secret Non-Nuclear Weapons Data	Р
NNSA	Information Group Protection Profile	17
MONINI	NAP 14.8-A, Secret Restricted Non-Nuclear Weapons Data	F
NNSA	Information Group Protection Profile NAP 14.9 A. Confidential Pastricted Data Sigmas 1 thru 13	P
ININDA	NAP 14.9-A, Confidential Restricted Data, Sigmas 1 thru 13 Information Group Protection Profile	r
NNSA	NAP 14.10-A, Secret Restricted Data, Sigmas 1 thru 13 and 15	P
THINDA	Information Group Protection Profile	1
	information Group i forcetion i forme	

Directive	Title	Full (F)
		Partial (P) Incorporation
NNSA	NAP 14.11-A, Secret Restricted Data, Sigmas 14 Information Group Protection Profile	Р
NNSA	NAP 14.12, NNSA Contingency Planning and Operations	F
NNSA	NAP 14.13, Transmission of Restricted and Formerly Restricted Data Over the Secret Internet Protocol Router Network (SIPRNet)	F
NNSA	NAP-14.14, Top Secret Information Group Protection Profile	F
NNSA	NAP-14.15, Top Secret Restricted Data Information Group Protection Profile	F
NNSA	NAP-14.16, Clearing, Sanitizing, and Destroying Information System Storage Media, Memory Devices, and Other Related Hardware	F
NNSA	NAP-18, Implementation of NNSA Pilot Program on Determination of Fiscal and Other Impacts of New or Revised Directives	F
NNSA	BOP-003-0304R1, Coordination and Approval Process (CAP) of Contract Actions	Р
NNSA	BOP-50.002, Establishment of a National Nuclear Security Administration (NNSA) Value Management (VM) Policy	Р
NNSA	BOP-50.003, Establishment of a National Nuclear Security Administration (NNSA) Independent Project Review (IPR) Policy	F
WQSD / NA-121.3	Quality Assurance Procedure (QAP) Manual, Revision 2, as published by the Weapon Quality & Surveillance Division (WQSD), NNSA	F
PXSO SD 1	Conducting Readiness Review of Hazardous Non-nuclear Facilities and Activities	F
AASHTO GDHS	American Association of State Highway and Transportation Officials	Р
ACGIH TLV Booklet	TLVs and FEIs Based on the Document of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices	F
ASME NUM-1-2000	Rules of Construction of Cranes, Monorails, and Hoists (With Bridge or Trolley or Hoist of the Underhung Type)	F
ANSI/ANS 8.1	Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	Р
ANSI/ANS 8.7	Nuclear Criticality Safety in the Storage of Fissile Material	P
ANSI/ANS 8.19	Administrative Practices for Nuclear Criticality Safety	F

Directive	Title	Full (F) Partial (P) Incorporation
ANSI/ANS 8.20	Nuclear Criticality Safety Training	F
ANSI/ANS 8.24-2007	Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations	F
ANSI/ANS 8.26-2007	Criticality Safety Engineer Training and Qualification Program	F
ANSI/ANS 10.4	Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs for the Nuclear Industry	F
ANSI/ASME B56.1-1993	Safety Standard for High Lift and Low Lift Trucks	F
ANSI/ASQ Z1.13.1999	Quality Guidelines for Research	F
ANSI / AWWA	C651: Disinfecting Water Mains C652: Disinfection of Water-Storage Facilities C653: Disinfection of Water Treatment Plants C654: Disinfection of Wells	Р
ANSI/CGA	Commodity Specification for Air, Part G-7.1	P
ANSI D6 1989	Manual on Uniform Traffic Control Devices for Streets and Highways	Р
ANSI-EIA 748A 1998	Standard for Earned Value Management Systems Intent Guide	F
ANSI/HFS 100 1988	Human Factors Engineering of VDT Workstations	F
ANSI/IEEE C95.1 (1991)	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300 GHz	F
ANSI/ISO/ ASQ Q9001-2000	American National Standard – Quality Management Systems – Requirements	F
ANSI/ISO/ IEC 17025- 2005	General Requirements for the Competence of Testing and Calibration Laboratories	F
ANSI S3.34	Guide for the Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand	F
ANSI Z41- 1991	Personal Protection – Protective Footwear	F
ANSI Z87.1- 1989	Practice for Occupational/Educational Eye and Face Protection	F
ANSI Z88-2- 1992	Respiratory Protection F	F
ANSI Z136	Safe Use of Lasers	P

Directive	Title	Full (F) Partial (P)
		Incorporation
Application Manual	Revised NIOSH Lifting Equation US DHHS, January 1994	F
ASME Section VIII	Boiler and Pressure Vessel Code	F
ASME NQA- 1 2000	Quality Assurance Requirements for Nuclear Facility Applications	F
Commercial Facility Waste Acceptance Criteria	Criteria for Acceptance of Solid Waste at Commercial Facilities	F
DOD TB 700-2	DOD Ammunition and Explosives Hazard Classification Procedures	F
DOE/NV- 325 - Revision 6	Criteria for Acceptance of Low Level Nuclear Waste for Long Term Retrieval Storage	F
EPA / 520-R- 94-004	RCRA Corrective Action Plan (May 1994) OSWER Directive 9902.3-2A	F
EPA SW-846	Test Methods for Evaluating Solid Waste: Physical / Chemical Methods	F
GPG-FM- 033	DOE Land Use Planning Guide – Guide for Planning Land Use at Pantex	F
IATA DGR	International Air Transport Associations – Dangerous Goods Regulations	F
ISO 14001- 2004	Environmental Management Systems Specification with Guidance for Use	F
MIL-STD- 1472	Department of Defense Design Criteria Standard – Human Engineering	F
NFPA 1	Uniform Fire Prevention Code (2006)	P
NFPA 10	Standard for Portable Fire Extinguishers (2007)	P
NFPA 13	Standard for the Installation of Sprinkler Systems (2007)	P
NFPA 15	Standard for Water Spray Fixed Systems for Fire Protection (2007)	P
NFPA 17	Standard for Dry Chemical Extinguishing Systems (2002)	P
NFPA 17A	Standard for Wet Chemical Extinguishing Systems (2002)	P
NFPA 20	Standard for the Installation of Stationary Pumps for Fire Protection (2007)	P
NFPA 24	Standard for the Installation of Private Fire Service mains and Their Appurtenances (2007)	Р

Directive	Title	Full (F) Partial (P) Incorporation
NFPA 25	Standard for the Inspection, Testing, and Maintenance of Water-Based Protection Systems (2002)	P
NFPA 30	Flammable and Combustible Liquids Code (2003)	P
NFPA 51B	Standard for Fire Prevention During Welding, Cutting, and Other Hot Work (1998)	P
NFPA 52	Compressed Natural Gas (CNG) Vehicular Fuel Systems Code (2006)	Р
NFPA 54	ANSI Z223.1-2002 National Fuel Gas Code (2006)	P
NFPA 55	Standard for the Storage, Use, and Handling of Compressed and Liquid Gases in Portable Cylinders (2005)	Р
NFPA 58	Liquefied Petroleum Gas Code (2004)	P
NFPA 70	National Electrical Code ® (2005)	F
NFPA 70E	Standard for Electrical Safety Requirements for Employee Workplaces	Р
NFPA 72	National Fire Alarm Code ® (2007)	P
NFPA 101	Life Safety Code ® (2006)	P
NFPA 230	Standard for the Fire Protection of Storage (1999)	P
NFPA 385	Standard for Tank Vehicles for Flammable and Combustible Liquids	Р
NFPA 780	Installation of Lightning Protection System	F
NFPA 801	Standard for Fire Protection For Facilities Handling Radioactive Material (2003)	Р
NFPA 1500	Fire Department Occupational Safety and Health Programs	F
NFPA 1582	Comprehensive Occupational Medical Program of Fire Departments	F
NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems (2000)	P
NUREG / CR-6698	Guide for Validation of Nuclear Criticality Safety Calculational Methodology	F
RM 257945	AL-R8 Pit Matrix Requirements	F
UPC Chap 3-10	Uniform Plumbing Code (2003)	F